

Problem 2 Reference Sheet (DO NOT turn in this page)

Use the following classes for Problem 2. We recommend you briefly skim it before answering questions. You may assume all necessary `#include` directives and `using namespace` declarations are present.

```
class Movie {
public:
    // EFFECTS: Constructs a Movie with the given title and length in
    //           minutes
    Movie(const string &title_in, int length_in)
        : title(title_in), length(length_in) {}

    // EFFECTS: Returns the title of this Movie.
    string get_title() const { return title; }
    // EFFECTS: Returns the length of this Movie in minutes.
    int get_length() const { return length; }

private:
    string title;
    int length; // (in minutes)
}; //Movie

class Cinema {
public:
    // EFFECTS: Constructs a Cinema with the given name and no movies.
    Cinema(const string &name_in) : name(name_in), num_movies(0) {}

    // YOU WILL IMPLEMENT THIS IN 2a)
    void add_movie(const string &title, int length);

private:
    string name;

    const static int MAX_MOVIES = 20;
    Movie * movies[MAX_MOVIES]; // array of POINTERS to Movie
    int num_movies;           // # of movies in the array (first N elements)
}; //Cinema
```

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